ABSTRACT

The invention provides a coding mode determining apparatus that enables selection of an appropriate coding mode with a smaller This coding mode determining apparatus is an processing amount. apparatus that determines at least one of a plurality of candidate coding modes of an image block. A full-pel prediction step (S41) derives a coding cost of each of the coding modes, based on motion estimation with integer pixel accuracy for small blocks, which are partitions of the image block that are obtained with the division methods of each of the coding modes. A candidate division method selecting step (S42) selects a subset of candidate division methods of a plurality of coding modes, based on the coding costs derived by the full pel prediction step (S41). A sub-pel prediction step (S43) derives a coding cost of each of the candidate division methods, based on motion estimation with non-integer pixel accuracy for the small blocks obtained with at least a subset of the subset of candidate division methods. A division method determining step (S44) determines a division method of the image block, based on the coding costs derived by the sub-pel prediction step (S43).

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